

Charging Connectors Compatible with  
the CCS Type-1 EV Fast Charging Standard  
**KW11 Series Connector Harness**

CONNECTOR  
MB-0387-2  
Feb. 2024

RoHS Compliant



Powerlance branded EV charging connectors combine durability and high-quality performance to provide the industry's most dependable solutions.



The KW11 is an Electric Vehicle (EV) charging connector compatible with the CCS (Combined Charging System) Type-1 electric vehicle fast charging standard and supports a rated charging current of 150A and 200A. The product is UL recognized as it has been tested to this standard and meets the associated rigorous product safety standards.

With the spread of EVs, it is expected that quick charger network usage will increase in various regions globally. The KW11 Series meets specifications that support requirements in the EV charging market in North America. The handle has a design that makes it easy to grip even while wearing thick gloves in extremely cold areas. The latch that secures the EV charging connector to EV inlets is reinforced with a metal core to prevent it from breaking, a common problem during field operation.

In addition, as a safety precaution, a double insulation structure has been adopted to protect the live components inside the connector from water ingress, so short circuit can be prevented even if the exterior is breached or damaged in any way by unexpected accidents.

### Features

- Compatible with the fast-charging standard CCS Type-1
- UL and cUL recognized products
- The strength of the latch is enhanced with a metal core reinforcement
- Safety design with waterproof protection of live parts inside the connector
- Easy-to-grip handle design even when wearing thick gloves
- Highly reliable design using materials proven to be resilient against harsh environmental conditions

### Application

Fast charger for Electric Vehicles (CCS Type-1 compatible, charging mode: Mode 4)

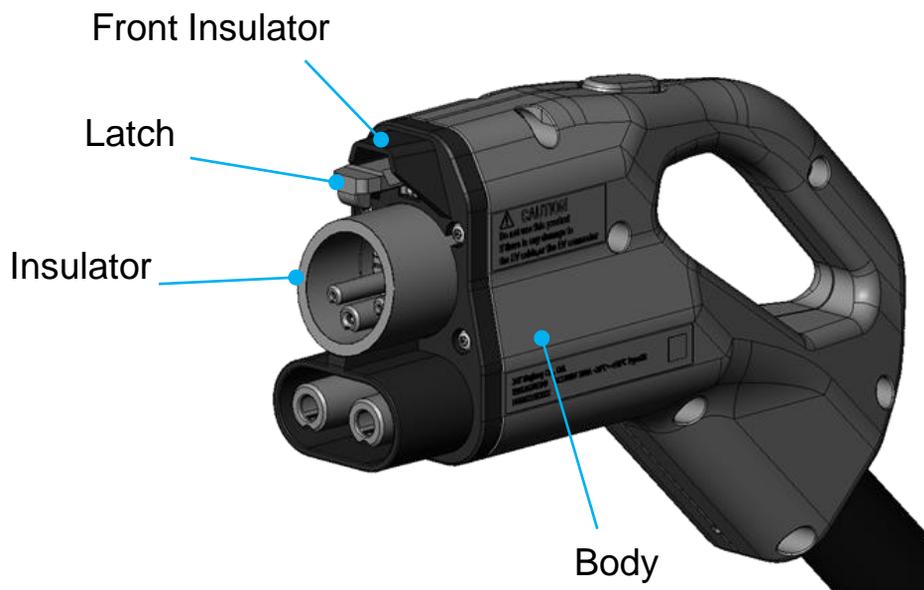
## General Specifications

Number of Contacts	Power: 2 pos Protective Earth : 1 pos Signal: 2 pos
Rated Current	Power: 150A / 200A <sup>1</sup> , Signal: 2A
Rated Voltage	Power: DC1000V, Signal: AC30V
Insulation Resistance	5 MΩ min. (Apply DC1000V between adjacent contacts)
Dielectric Withstanding Voltage	AC 3,000V / 1 minute
Durability	10,000 cycles
Insertion Force	75N max.
Operating Temperature Range	-30°C to +50°C

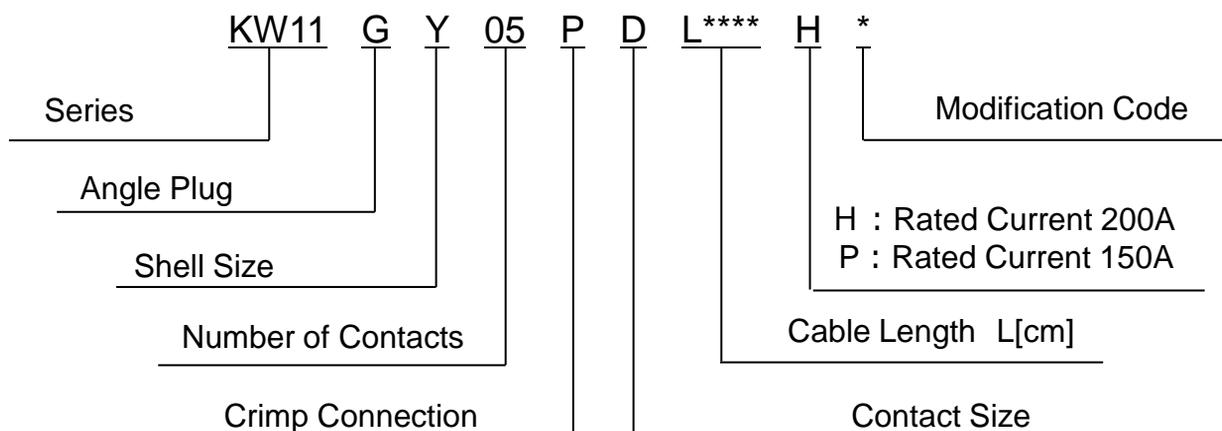
<sup>1</sup> Products with rated currents of 150A and 200A are available.

## Materials and Finishes

Component	Material	Finishing
Front Insulator	Environment Resistant Resin	-
Insulator	Environment Resistant Resin	-
Body	Environment Resistant Resin	-
Latch	Environment Resistant Resin + Stainless Steel	-



Ordering Information



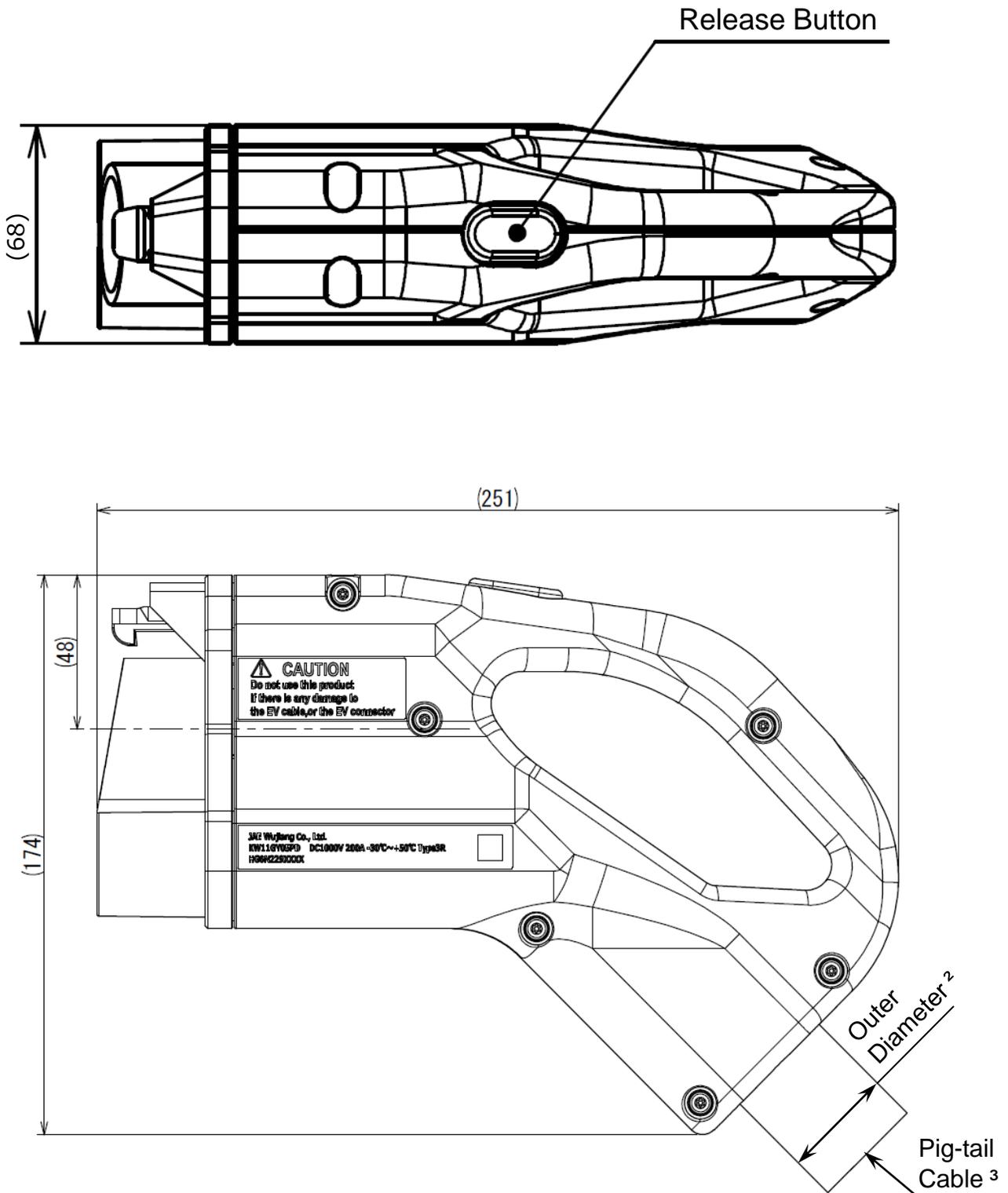
Part Number List

Part Number	Drawing No.	Cable Length	Specifications	Handling Instructions
KW11GY05PDL0300HG	SJ125638	3.0m	JACS-40243-01	JAHL-40243
KW11GY05PDL0350HG		3.5m		
KW11GY05PDL0400HG		4.0m		
KW11GY05PDL0450HG		4.5m		
KW11GY05PDL0500HG		5.0m		
KW11GY05PDL0550HG		5.5m		
KW11GY05PDL0600HG		6.0m		
KW11GY05PDL0650HG		6.5m		
KW11GY05PDL0700HG		7.0m		
KW11GY05PDL0750HG		7.5m		
KW11GY05PDL0800HG		8.0m		
KW11GY05PDL0850HG		8.5m		
KW11GY05PDL0900HG		9.0m		

## Part Number List

Part Number	Drawing No.	Cable Length	Specifications	Handling Instructions
KW11GY05PDL0300PG	SJ125639	3.0m	JACS-40243-02	JAHL-40243
KW11GY05PDL0350PG		3.5m		
KW11GY05PDL0400PG		4.0m		
KW11GY05PDL0450PG		4.5m		
KW11GY05PDL0500PG		5.0m		
KW11GY05PDL0550PG		5.5m		
KW11GY05PDL0600PG		6.0m		
KW11GY05PDL0650PG		6.5m		
KW11GY05PDL0700PG		7.0m		
KW11GY05PDL0750PG		7.5m		
KW11GY05PDL0800PG		8.0m		
KW11GY05PDL0850PG		8.5m		
KW11GY05PDL0900PG		9.0m		

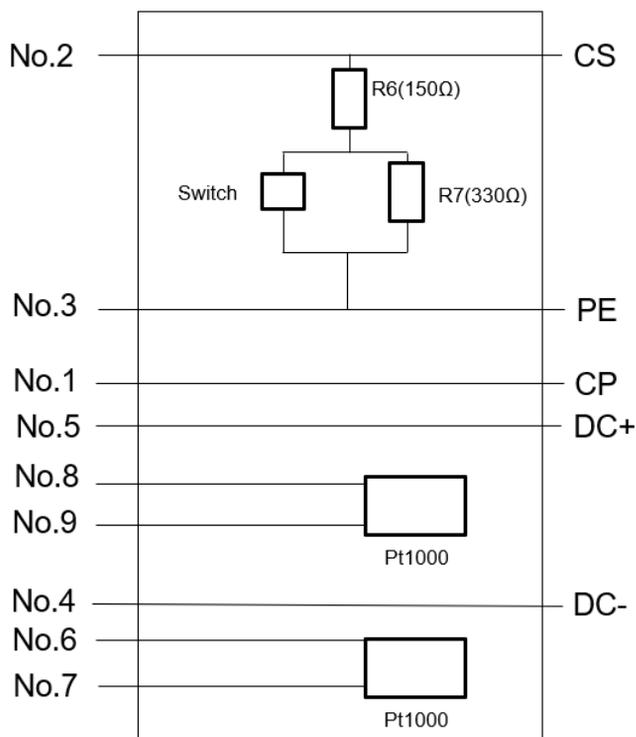
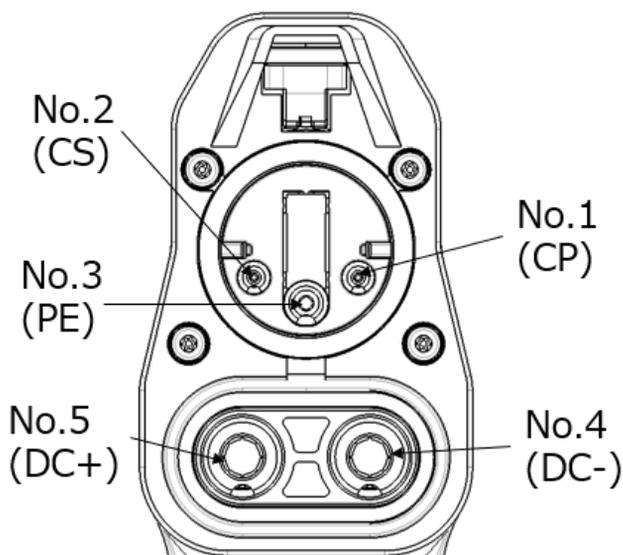
Outer Dimensions



<sup>2</sup> KW11GY05PDL\*\*\*\*HG:Φ35, KW11GY05PDL\*\*\*\*PG:Φ31

<sup>3</sup> The cable is pigtailed at the opposing end of the connector

Contact Arrangement



Arrangements	Terminal Number	Wire Outer Color	Wire Size
CP	1	Blue	AWG18
CS	2	White	AWG18
PE	3	Green & Yellow	AWG6 (KW11GY05PDL****HG)
			AWG5 (KW11GY05PDL****PG)
DC-	4	Black	AWG1 (KW11GY05PDL****HG)
			AWG3 (KW11GY05PDL****PG)
DC+	5	Red	AWG1 (KW11GY05PDL****HG)
			AWG3 (KW11GY05PDL****PG)
Pt1000 (DC-)	6	Brown	AWG18
	7	Green	AWG18
Pt1000 (DC+)	8	Pink	AWG18
	9	Orange	AWG18

## Temperature Sensor Specifications

Sensor Type	Pt1000
Standards	DIN EN 60751
Measured Current	0.3mA
Temperature Range	-50°C~+130°C
Temperature Coefficient	3850ppm/K
Shutdown Temperature	90°C (Equivalent to a Pt1000 value of 1347.04Ω)

### **Notice:**

1. The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.

2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.

3. The products presented in this brochure are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1) Applications that require consultation:

(i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:

Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.

(ii) We may separately give you our support with a quality assurance program that you specify, when you think of a use such as :

Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

**Japan Aviation Electronics Industry, Limited**

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